

| | | |
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| APPROVED | U.G. FIG. | |
| BY | CLASS | SUBCLASS |
| DRAFTSMAN | | |

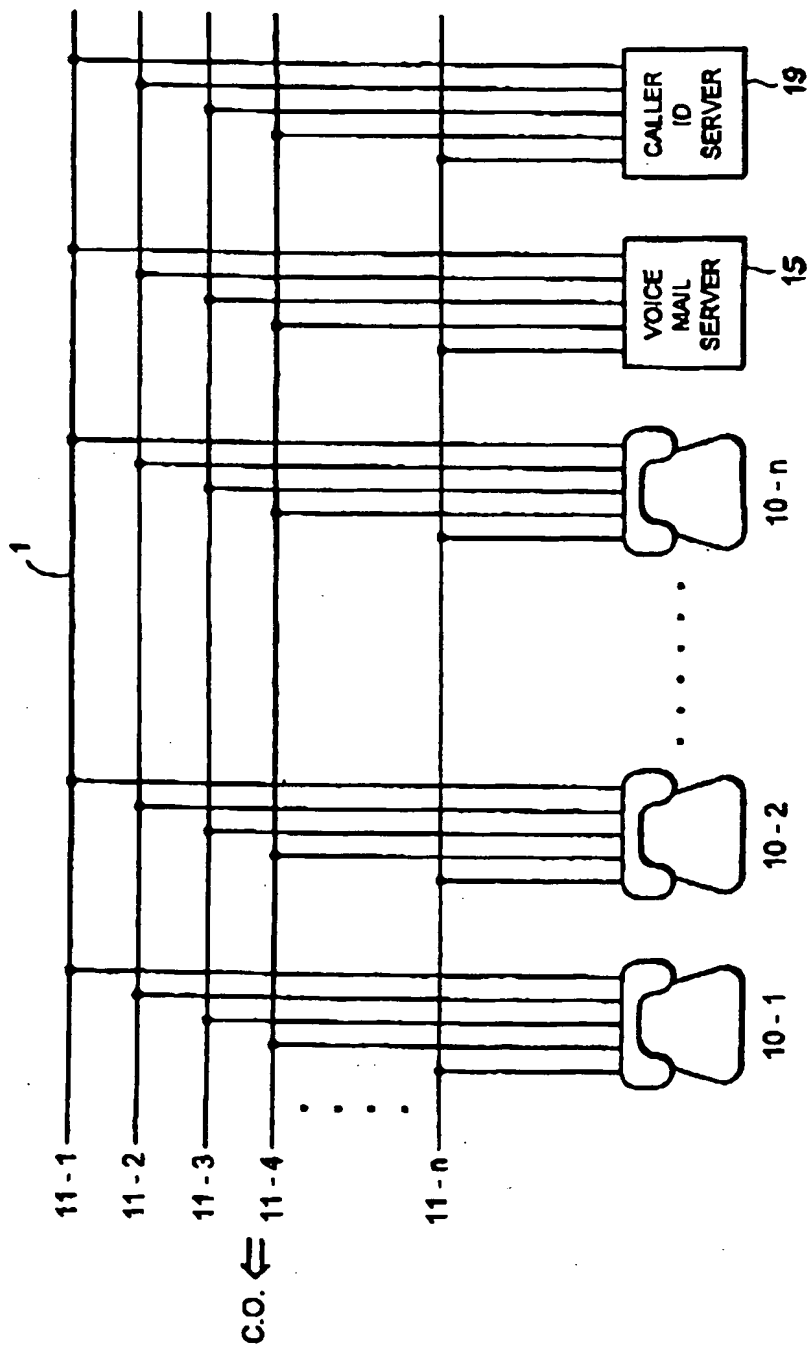
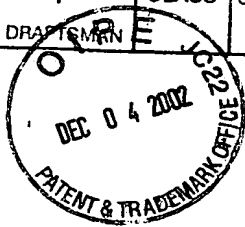


FIG. 1

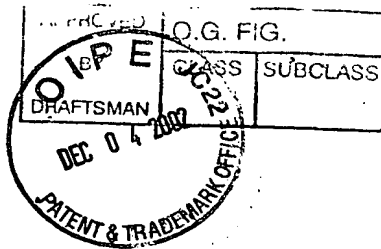


FIG. 3C

| CHANNEL TYPE | | FREQUENCY | MAX. POWER (135 OHMS) | RESIDUAL FM | DISTORTION | SPURIOUS | MAX. DEVIATION |
|------------------|-----------|-----------|-----------------------|-------------|-------------|----------|----------------|
| AUDIO (PAGE) | TRANSMIT | 390 KHz | -10 dBm | < 200 Hz | 3% AT 1 KHz | -50 dB | ± 1 - 5 KHz |
| AUDIO (INTERCOM) | ORIGINATE | 420 KHz | -10 dBm | < 200 Hz | 3% AT 1 KHz | -50 dB | ± 1 - 5 KHz |
| AUDIO (INTERCOM) | ANSWER | 390 KHz | -10 dBm | < 200 Hz | 3% AT 1 KHz | -50 dB | ± 1 - 5 KHz |

| CHANNEL TYPE | | FREQUENCY | 12dB SINAD SENSITIVITY (135 OHMS) | 3 dB BAND-WIDTH | DISTORTION | 20 dB QUIETING SENSE | ADJACENT CHANNEL |
|------------------|-----------|-----------|-----------------------------------|--------------------|-------------|----------------------|------------------|
| AUDIO (PAGE) | RECEIVE | 390 KHz | -65 dBm | 15 KHz ± 1 - 2 KHz | 3% AT 1 KHz | -65 dBm | -50 dB |
| AUDIO (INTERCOM) | ANSWER | 420 KHz | -65 dBm | 15 KHz ± 1 - 2 KHz | 3% AT 1 KHz | -65 dBm | -50 dB |
| AUDIO (INTERCOM) | ORIGINATE | 390 KHz | -65 dBm | 15 KHz ± 1 - 2 KHz | 3% AT 1 KHz | -65 dBm | -50 dB |

FIG. 3A

| | |
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| CHANNEL TYPE | | FREQUENCY | MAX POWER (135 OHMS) | RESIDUAL FM | DISTORTION | SPURIOUS | MAX. DEVIATION |
|--------------|----------|---------------|--|------------------------|------------|----------------------------|---------------------|
| DATA | TRANSMIT | 319 / 331 KHz | -10 dB | N/A | N/A | -60 dB | +/- 5 KHz |
| CHANNEL TYPE | | FREQUENCY | 12 dB SINAD SENSITIVITY (135 OHMS) | 3 dB BAND- WIDTH | DISTORTION | 20 dB QUIETING SENSE | ADJACENT CHANNEL |
| DATA | RECEIVE | 319 / 331 KHz | N/A | 15 KHz +/- 2 KHz | N/A | N/A | -50 dB |

FIG. 3B

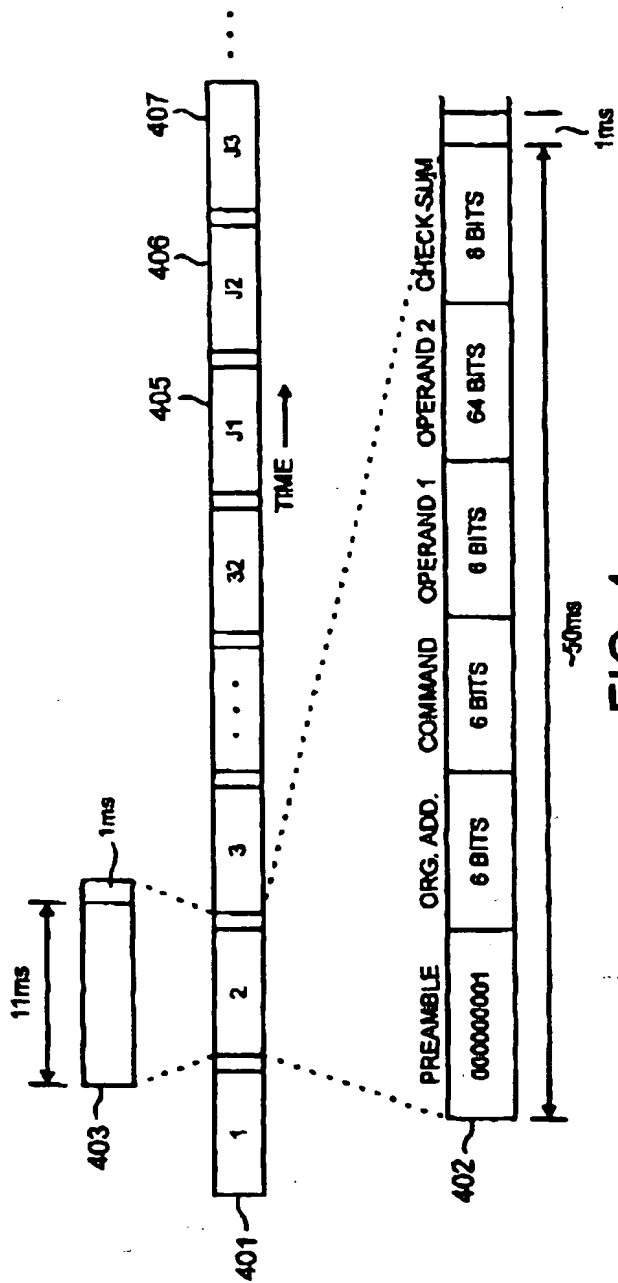
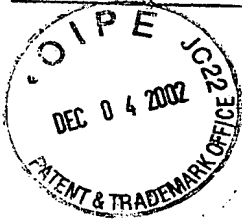


FIG. 4

| | | |
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| APPROVED | O.G. FIG. | |
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WHERE
 0 OR 1 — DONT CARE IN RECEIVING SIDE
 N — FROM 0 TO 31, L₀, L₁, L₂ USERS MAXIMUM
 31-39 ARE DEDICATED FOR NEW USER TO JOIN IN, SAY JOIN IN SLOTS
 L₀, L₁, L₂, L₃, L₄, L₅, L₆, L₇ — 1, LINE ACTIVE; 0, LINE INACTIVE
 EXT # — 4 DECIMAL DIGITS (CONFIGURATION 4th, 3rd, 2nd, 1st DIGITS TO FORM AN EXT #)
 IF EXT # IS INAPPLICABLE, SET Q, C, G FOR AN EMPTY EXTENSION
 L₈ & L₉ RESERVED

JOIN IN SLOT - 31 TO 39
 JOIN IN ID - 0 TO 30
 MESSAGE WAITING ON/OFF (EXTENSION)
 TRANSFER ON
 - SUPPORT ONE LINE AT ONE COMMAND

| | ORIG ADDR 8 BITS | COMMAND 8 BITS | OPERAND 1 8 BITS | OPERAND 2 64 BITS | CHECK SUM 8 BITS |
|------------------------------------|------------------------|---------------------------|---|---|------------------------|
| BROADCAST | | | | | |
| LINE ON HOLD | 0 | LINE ON HOLD | L ₀ , L ₁ , L ₂ , L ₃ , L ₄ , L ₅ L ₁ | 4 EXT # - L ₆ , L ₇ L ₄ , L ₅ (4 DIGITS EACH) | |
| LINE IN USE | " | LINE IN USE | L ₀ , L ₁ , L ₂ , L ₃ , L ₄ , L ₅ L ₁ | 4 EXT # - L ₆ , L ₇ L ₄ , L ₅ (4 DIGITS EACH) | |
| LINE SECURE | " | LINE SEC | L ₀ , L ₁ , L ₂ , L ₃ , L ₄ , L ₅ L ₁ | 4 EXT # - L ₆ , L ₇ L ₄ , L ₅ (4 DIGITS EACH) | |
| LINE SECURE RELEASE | " | LINE SEC REL | L ₀ , L ₁ , L ₂ , L ₃ , L ₄ , L ₅ L ₁ | 4 EXT # - L ₆ , L ₇ L ₄ , L ₅ (4 DIGITS EACH) | |
| MESSAGE WAITING ON (EXTENSION) | " | M WAIT ON (EXTENSION) | 0 | EXT # (4 DIGITS) 00000000 L ₁ , 0 | |
| MESSAGE WAITING OFF (EXTENSION) | " | M WAIT OFF (EXTENSION) | 0 | EXT # (4 DIGITS) 00000000 L ₁ , 0 | |
| JOIN | JOIN IN SLOT | JOIN | JOIN IN ID | Q, Q, Q, 0 | |
| CALLER ID | " | CALLER ID | CALLER ID PACKET # | INFORMATION | |
| PASS THROUGH | " | PASS THRU | PASS THRU OPERAND 1 | PASS THRU OPERAND 2 | |

FIG. 5

| | | |
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| PARTNERSHIP | | | | | |
|--------------------------------------|---|-----------------------------|---------------------------|--|--|
| TRANSFER ON | n | TFR ON | DEST. ADR | EXT # (4 DIGITS) 000000L2 L1, MAIL ID, 0 | |
| TRANSFER OFF | n | TFR OFF | L8, L5, L4, L3, L2, L1 | 4 EXT # - L8, L5 L4, L3 (4 DIGITS EACH) | |
| INTERCOM ON | n | ICM ON | DEST. ADR | ICM PICK UP INDICATION 0, 0, 0 | |
| INTERCOM OFF | n | ICM OFF | DEST. ADR | 0, 0, 0, 0 | |
| ACKNOWLEDGE | n | ACK | DEST. ADR | 0, 0, 0, 0 | |
| ACCESS DENY | n | DENY | DEST. ADR | 000000 NO EXT # BUSY, 0, 0, 0 | |
| DND (DESTINATION) | n | DND (DESTINATION) | DEST. ADR | 000000 OVERRIDE | |
| MESSAGE WAITING OFF (DESTINATION) | n | M WAIT OFF (DESTINATION) | DEST. ADR | 0, 0, 0, 0 | |
| RAM ACCESS REQUEST | n | RAM ACCESS REQUEST | DEST. ADR | RAM REQUEST, ADDR., DATA | |
| RAM ACCESS RESPONSE | n | RAM ACCESS RESPONSE | DEST. ADR | RAM RESPONSE, ADDR., DATA | |

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FIG. 5CONT'D

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| APPROVED | O.G. FIG. | |
| BY | CLASS | SUBCLASS |
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| | | | | | | | |
|-----|----------------------------------|---|----------|-------------------------------------|--|------------|--|
| 507 | EXTENDED COMMAND | | | | | | |
| | REJECT | n | EXT. COM | REJECT | | 0, 0, 0, 0 | |
| | NO ACTION CHANGE | n | EXT. COM | NO CHANGE | | 0, 0, 0, 0 | |
| | PAGE ON | n | EXT. COM | PAGE ON | | GROUP 0 | |
| 508 | PAGE OFF | n | EXT. COM | PAGE OFF | | 0, 0, 0, 0 | |
| | INTERCOM IN USE | n | EXT. COM | ICM IN USE | ICM CALLED ID, ICM IN TALKING INDICATION, 0, 0, 0 | | |
| 510 | MUSIC AVAILABLE | n | EXT. COM | MUSIC AVAILABLE | | 0, 0, 0, 0 | |
| | MUSIC UNAVAILABLE | n | EXT. COM | MUSIC UNAVAILABLE | | 0, 0, 0, 0 | |
| | SUPERVISORY CALL | n | EXT. COM | SUPERVISORY CALL | | 0, 0, 0, 0 | |
| | SUPERVISORY CALL CONFIRMATION | n | EXT. COM | SUPERVISORY CALL CONFIRMATION | | 0, 0, 0, 0 | |
| | SUPERVISORY CALL END | n | EXT. COM | SUPERVISORY CALL END | | 0, 0, 0, 0 | |

FIG. 5CONT'D

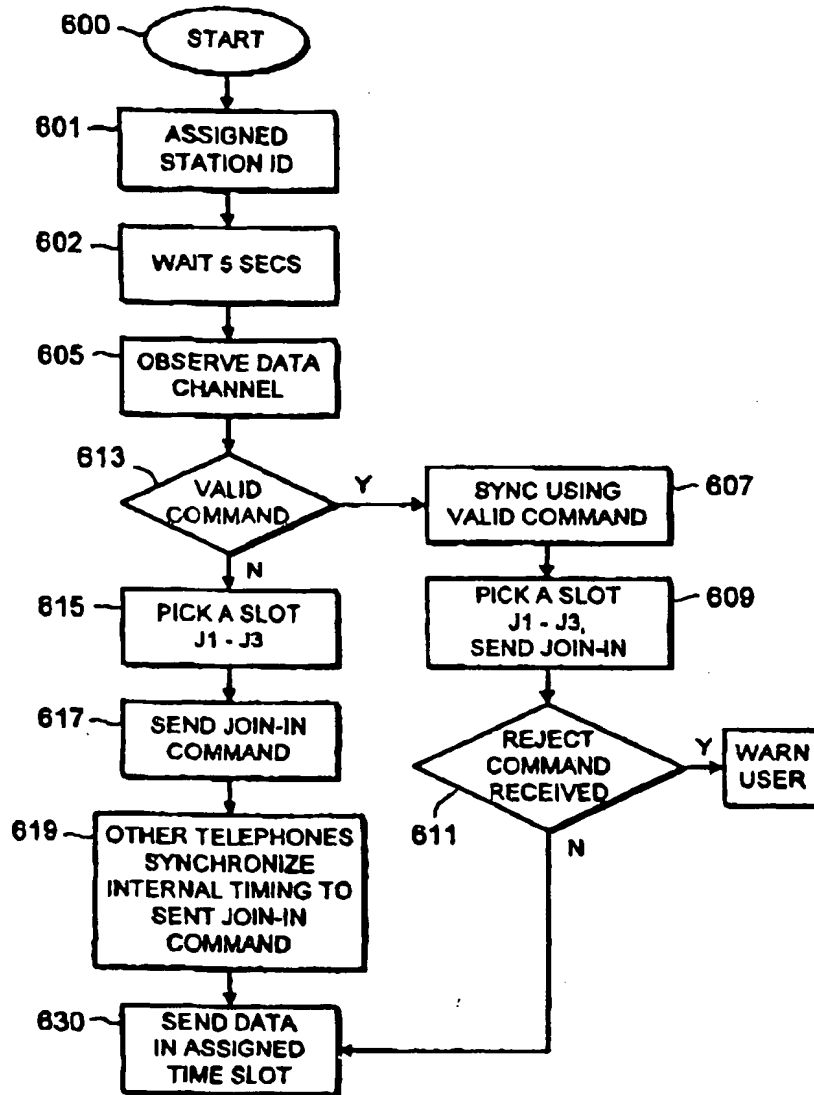


FIG. 6

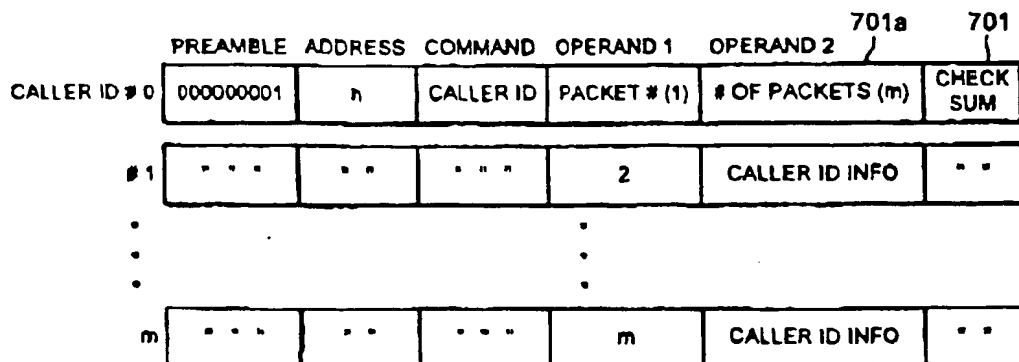
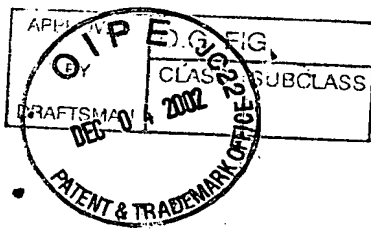


FIG. 7

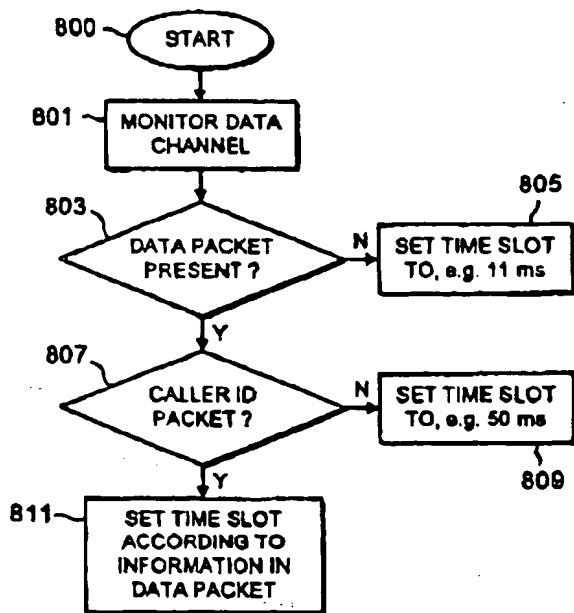
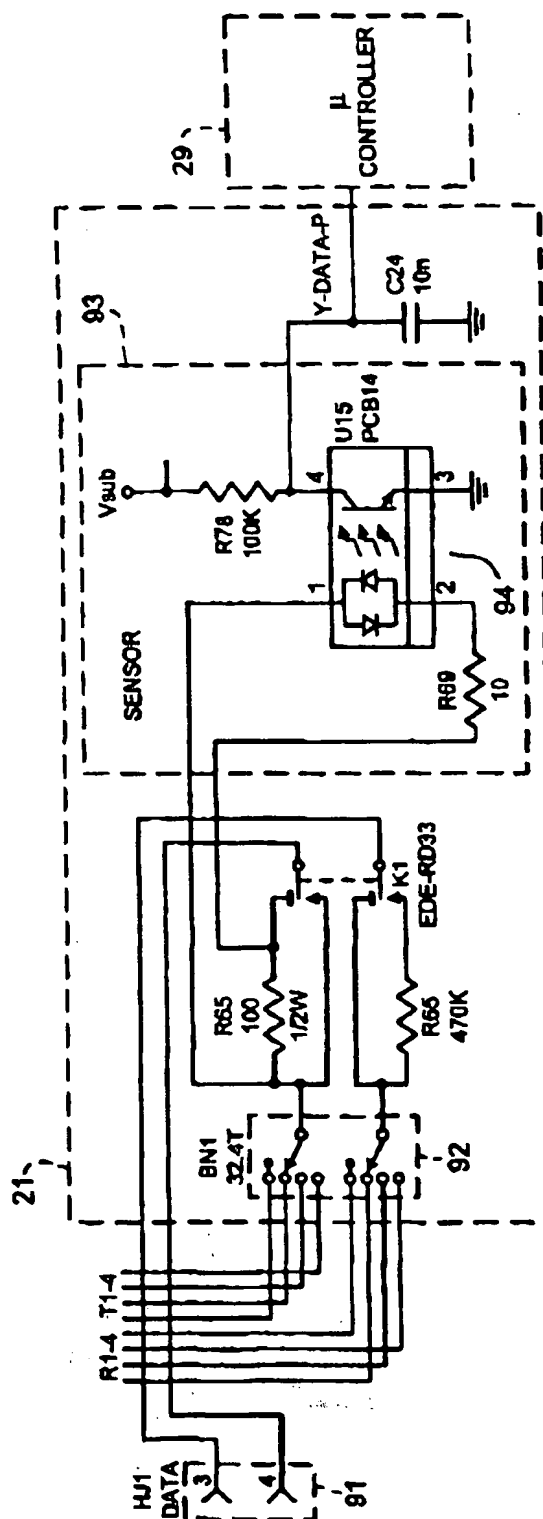


FIG. 8



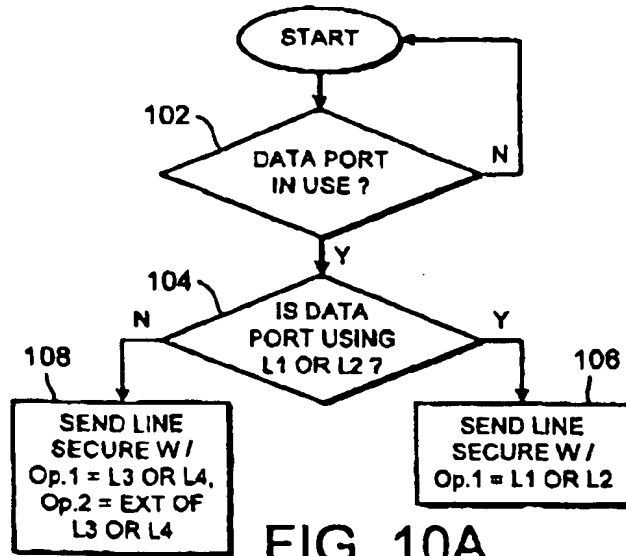
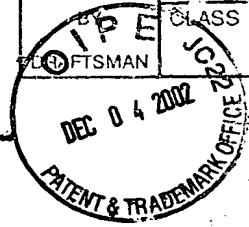


FIG. 10A

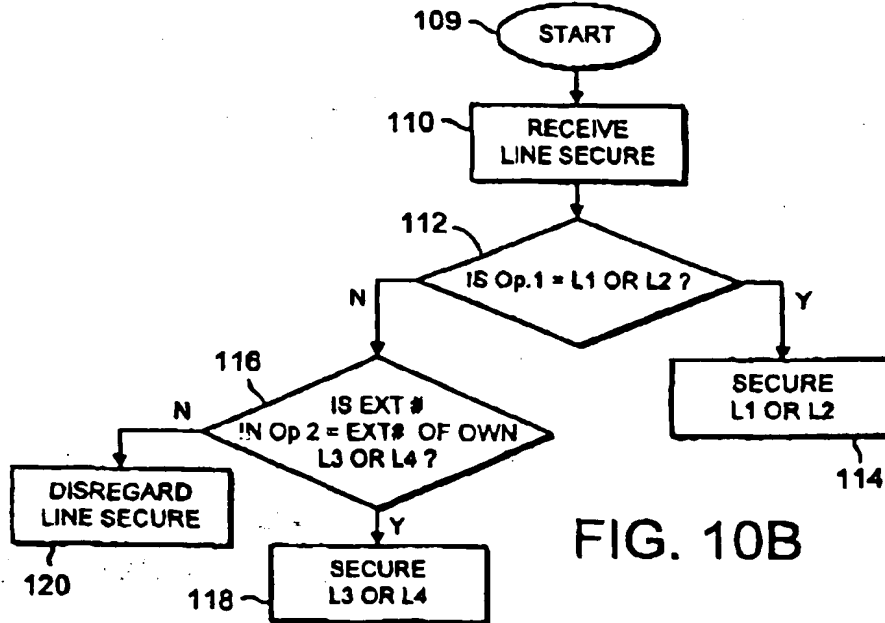


FIG. 10B

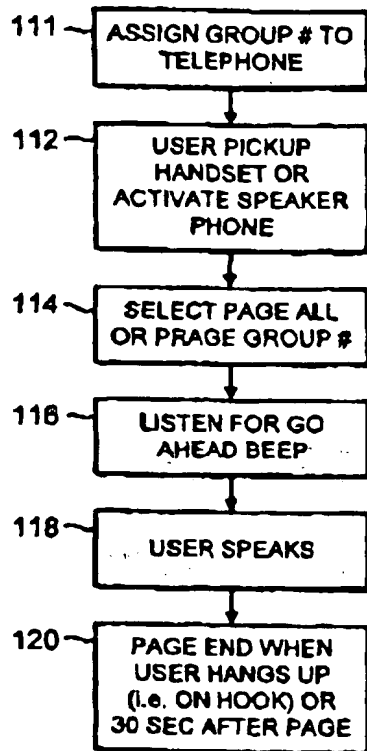
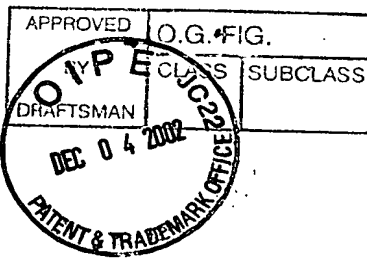


FIG. 11A

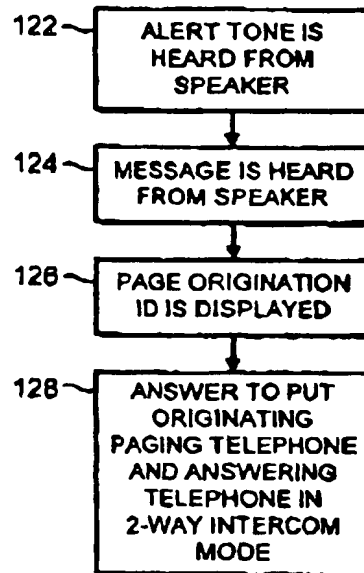


FIG. 11B